

Appl. No. 10/604,860
Reply to Office action of September 07, 2007

REMARKS/ARGUMENTS

Request for Continued Examination:

- 5 The applicant respectfully requests continued examination of the above-indicated application as per 37 CFR 1.114. Claims 1 and 21 have been amended. Reconsideration of claims 1-24 is respectfully requested.

1. Background

- 10 Claims 1-24 have been rejected for reasons of record. Claim 10 would be allowable if rewritten appropriately in independent form.

2. Response

- 15 Without disclaimer of any kind, the limitations of using a 2T write strategy (Paragraph [0037]) and the delay from a trailing edge of a last pulse of the write time waveform to a position the write time waveform switches back to an erase power state being calculated according to waveform lengths of the previous land section, the current pit section, and the next land section (Claim 10) have been added to claim 1.

- 20 There is no teaching in known references that the delay from a trailing edge of a last pulse of the write time waveform to a position the write time waveform switches back to an erase power state being calculated according to waveform lengths of the previous land section, the current pit section, and the next land section. The Examiner suggests Fig.36 of Asada shows a delay, but the applicant is unable to locate any
25 teachings in the references of calculating the delay as claimed.

- Additionally, as previously noted, the Asada et al. reference is directed towards a waveform that exclusively utilizes a 1T strategy (Col.17, lines 35-36). On the other hand, the present invention method utilizes the 2T strategy and defines the write strategy
30 parameters in great detail. This is not merely an optimization, but an entirely different

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situation. The 1T strategy utilized by Asada fails to work satisfactorily in high speed recording devices because the write time waveform is not long enough to allow the chemicals on the surface of the optical storage medium to properly solidify to form the pit section without distortion (Paragraph [0007]). The 2T strategy used by the present invention eliminates the solidifying time shortage problem of the 1T strategy and “there is higher degree of freedom to adjust the write strategy parameters to adequately eliminate jitters of the current pit sections due to internal inaccuracies of the optical storage medium.” (Paragraph [0037]).

Concerning claim 21, limitations have been amended to read “each of the repeating pulse parameters uniquely corresponding to a pulse of all but first and last pulses and determining the length of the corresponding pulse”. As Paragraph [0028] states and as is shown in Fig.3, the claimed embodiment includes a plurality of pulses identified as α_2 , α_3 , and α_4 located between the first and last pulses. Each of the repeating pulse parameters correspond to one of said pulses, For example, the first repeating pulse parameter may correspond to and determine the length of the pulse labeled α_2 , the second repeating pulse parameter may correspond to and determine the length of the pulse labeled α_3 , and the third repeating pulse parameter may correspond to and determine the length of the pulse labeled α_4 , however the exact number of pulses is not limited to three as shown in the example and may vary according to design considerations.

The citations by the Examiner (Asada, Col.6, line 66-Col.7, line 14) do not indicate “parameters uniquely corresponding to a pulse of all but first and last pulses and determining the length of the corresponding pulse”. Due to this difference, the current application is able to individually adjust lengths of individual pulses within the RLL modulation waveform, allowing better control and writing results for the current pit section.

3. Summary

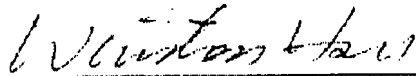
The applicant asserts that known references alone or in combination fail to

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anticipate or make obvious the limitations of claims 1-20, specifically at least a 2T
write strategy and the delay being calculated according to waveform lengths of the
previous land section, the current pit section, and the next land section, nor the
limitations of claims 21-24, specifically at least "each of the repeating pulse
5 parameters uniquely corresponding to a pulse of all but first and last pulses and
determining the length of the corresponding pulse".

These differences in functionality distinguish the present claims over the
reference. Therefore, without disclaimer of any kind and at least for the reason that the
allowability of claims 2-20 and 22-24 ultimately depend upon the allowability of their
10 respective base claims, reconsideration of claims 1-24 is respectfully requested.

Sincerely yours,



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D.C. is 12 hours behind the Taiwan time, i.e. 9 AM in D.C. = 9 PM in Taiwan.)